## Setting up a Bluetooth Connection Between the SOS Server & iPad

#### Overview

In SOS version 4.3 we added the ability to connect an iPad to the SOS server over a bluetooth connection. Until this time all iPad/SOS server connections were over wifi. The iPad bluetooth connection replaced the Wii remotes in SOS version 5.0.

#### Equipment

Sites with SOS version 4.1 or higher will have Bluetooth USB adapters installed with their systems. If you do not have Bluetooth USB adapters or have a version of SOS prior to 4.1, please contact SOS Support at <a href="mailto:sos.gsd@noaa.gov">sos.gsd@noaa.gov</a>.

#### Limitations

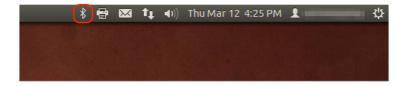
The iPad supports Bluetooth connections over a range of 10m so the SOS computers will need to be close to the sphere. The range may be reduced by walls, electromagnetic interference or other obstructions.

In testing we have discovered that regular re-pairing may be required. While this is not ideal, re-pairing the computer and iPad is trivial to do. (See: **Re-pairing the iPad and the SOS computer** - page 9)

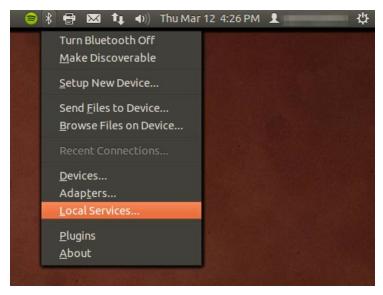
### **Preparing the SOS Server**

This will need to be done on both SOS computers.

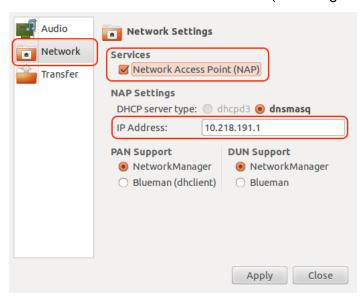
- 1. Make sure that the Bluetooth USB adapter is plugged in.
- 2. Click on the left-most bluetooth icon in the menu bar along the top of the screen.



3. In the drop-down that appears, select "Local Services".



- 4. In the "Local Services" window, select the "Network" option on the left. (See image after step 11)
- 5. In the "Services" section, check the "Network Access Point" option. (See image after step 11)
- 6. Modify the IP Address in the "NAP Settings" section. (Typically we delete and re-type the "1") Once this is done, the Apply button will no longer be greyed out. Write down the IP Address in this field. You will need it later on the iPad. (See image below)



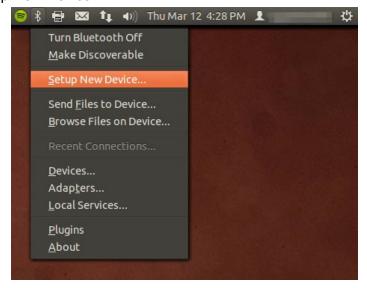
- 7. Click "Apply".
- 8. Close the Local Services program.

### Preparing the iPad

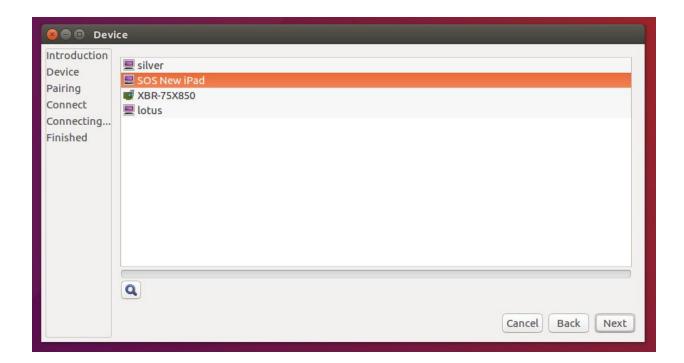
- 1. Open the "Settings" app.
- 2. Select the "Wi-Fi" section and disable the wifi by moving the "Wi-Fi" slider to the left
- 3. Select the "Bluetooth" section and enable Bluetooth by moving the slider to the right.

### Creating a connection between an iPad and the SOS computer

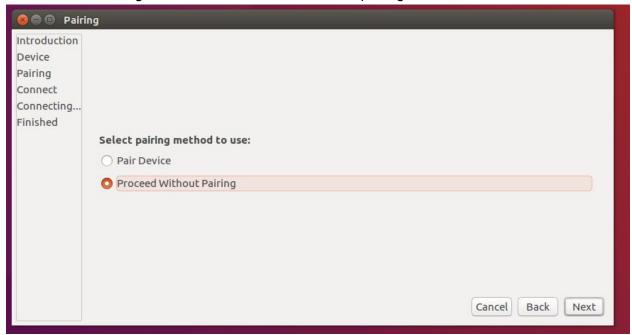
- 1. Click Bluetooth menu bar icon.
- 2. Select "Setup New Device".



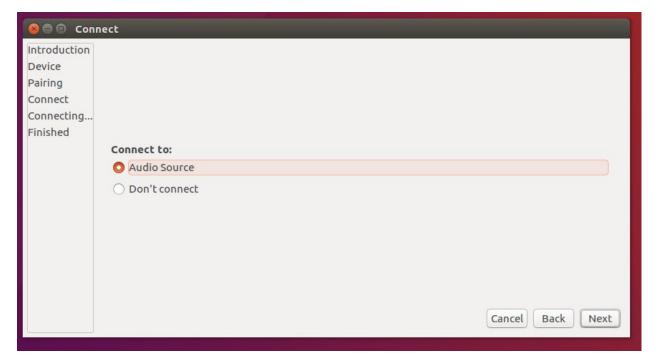
- 3. In the window that appears, click "Next" until you get to the "Device" screen below. Select your iPad by clicking on it. Then click "Forward".
  - a. Note: If the iPad doesn't appear in the "Device" screen, open the Settings app on the iPad and select the "Bluetooth" tab. Then, click on the search icon (magnifying glass) in the lower left corner of the "Device" screen.



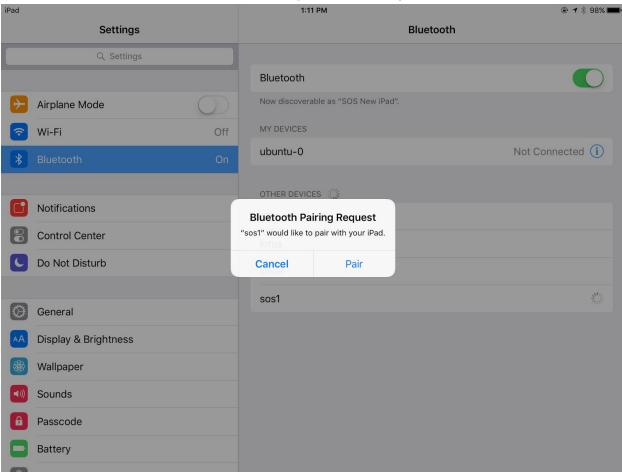
4. In the "Pairing" screen, select "Proceed without pairing".



- 5. Note for this next part you will need the iPad, have it nearby and unlock the screen.
- 6. Choose to connect to the iPad as an "Audio Source"

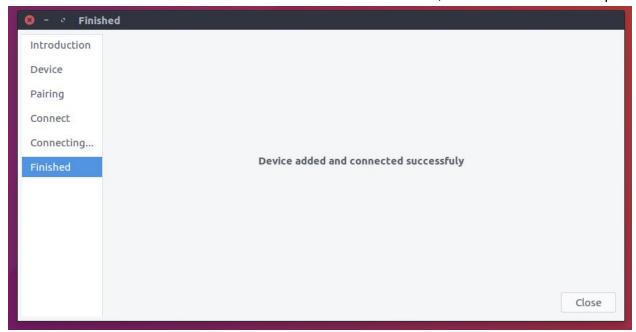


7. You will then see the below screen on your iPad. (Image 2) Tap "Pair" on the iPad.

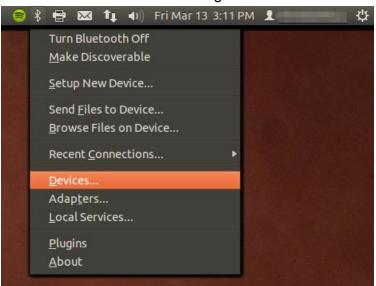


iPad while pairing

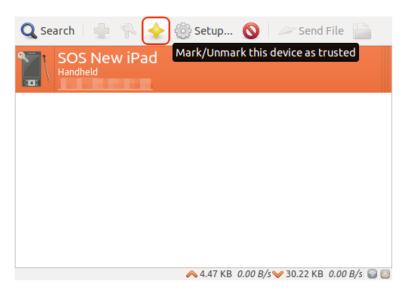
8. You should then see the "Finished" screen below. However, there are a few more steps.



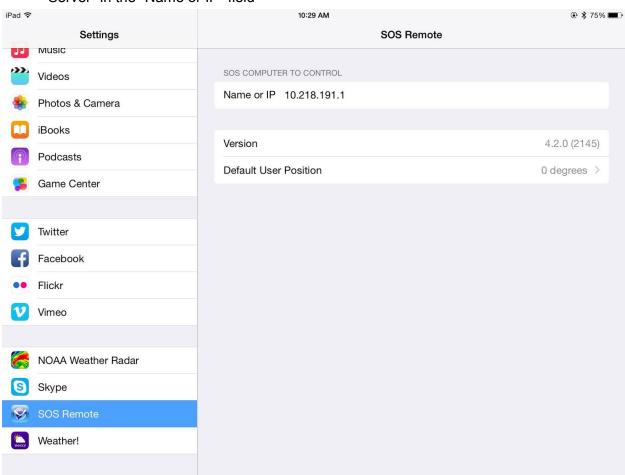
- 9. Close the "Bluetooth Devices" window.
- 10. Click on the bluetooth icon in the menu bar again and select "Devices".



11. In the "Bluetooth Devices" window that opens, click to select your iPad and mark it as "trusted" by clicking the star icon. See the image below.



- 12. On the iPad, open the "Settings" app.
- 13. In the "SOS Remote" section, put the IP address from step 11 of "Preparing the SOS Server" in the "Name or IP" field



14. If you see two linked rings in the upper left corner of the iPad's menu bar, your iPad should now be ready to control the Sphere.

a. If the linked rings are not present, open the Settings app, go to the Bluetooth tab and select the computer you would like to connect to. (Note: The computer may be named something generic like "ubuntu-0")

# Re-pairing the iPad and the SOS computer

## On the iPad:

- 1. Open the "Settings" app.
- 2. Select the "Bluetooth" section.
- 3. Tap on the SOS computer you would like to connect to.